

network. Each vehicle 32a, 32b, 32n in the collection of vehicles 30 features a data collector/router 35a, 35b, 35n that queries emissions data generated by each vehicle's ECU and OBD-II systems through an OBD buss. After the query, each data collector/router 35a, 35b, 35n receives emissions data from the host vehicle 32a, 32b, 32n and sends it as a data packet over a wireless airlink 38 to the wireless communication system 15. The wireless communication system 15 features a standard hardware component 19 (e.g. a system of base stations, computers, and switching and routing hardware) and software component 17 (e.g., software for controlling the above-mentioned hardware) that relay the data packet through a network connection (e.g., a digital line) 40 to the host computer system 12.

Amend the paragraph beginning at page 27, line 4 as follows:

In addition, data packets routed through the wireless communications system 15 can be analyzed to determine the vehicle's approximate location. This can be done with relatively low accuracy (within a few miles) by simply recording the location of a specific base station in the hardware component 17 of the wireless communications system 15 that routes the data packet to the host computer system 12. The accuracy of the vehicle's location is increased by recording the location of multiple base stations within range of the vehicle, and then analyzing these data using conventional triangulation algorithms. The data collector/router can also be modified to include hardware for global positioning (GPS). Using a satellite infrastructure, GPS hardware transmits real-time longitude and latitude values that can be analyzed to accurately determine a vehicle's location.

In the Claims:

Please cancel claim 6, without prejudice.

Please amend claims 1, 2, 4, 7, 13, 16, 17, 18, 21 and 24 as follows:

1. (Once Amended) A method for characterizing a vehicle's emissions, comprising the steps of:

generating data representative of the vehicle's emissions with at least one sensor disposed within the vehicle;